

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Matrix Presentations of Outputs from Dyna-METRIC Type Models, Data Annex		5. TYPE OF REPORT & PERIOD COVERED Final
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Robert E. Hiller, Ph. D. John P. Wilhelm, Col, USAF Kenneth C. Almquist, Maj, USAF		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS HQ Pacific Air Forces AV (315) 449-6325 Operations Analysis Office COM (808) 449-6325 Hickam AFB, HI 96853		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS same		12. REPORT DATE 22 April 1983
		13. NUMBER OF PAGES 27
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE not applicable
16. DISTRIBUTION STATEMENT (of this Report) UNLIMITED		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES Vol II of two volumes		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Logistics                      NORS                      Pipeline Theory Supply                          Sustainability              Spare Parts Aircraft Repair              Dyna-METRIC              Computer Model NMCS                              Backorders                  Probability		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This document is a collection of computer printouts to accompany Vol I of this report.		

# OPERATIONS ANALYSIS OFFICE

VOLUME II

DATA ANNEX TO ACCOMPANY

MATRIX PRESENTATIONS OF OUTPUTS FROM DYNA-METRIC TYPE MODELS *V. 2*

APRIL 1983



HQ PACIFIC AIR FORCES

VOLUME II

D A T A    A N N E X

To Accompany

MATRIX PRESENTATIONS OF  
OUTPUTS FROM  
DYNA-METRIC TYPE MODELS

22 April 1983

ROBERT E. HILLER, Ph. D.

JOHN P. WILHELM, Col, USAF

KENNETH C. ALMQUIST, Maj, USAF

HQ PACAF/OA

HICKAM AFB, HI 96853

# MATRIX 1

## STOCK ASSET VECTORS

DATE 11-10-81

\*\*\* U N C L A S S I F I E D \*\*\*

EXAMPLE 42 NSN-S \*\*\* AP. A/C 1620 FH/SRT \*\*\* SORTIE RATES 0.60 3.00 1.00 1.00 \*\*\* CONSTANT RCT/DRT TIMES

NSN	OPTION	1	2	3	4	5	6	7	8	9	\$L
42	1	7	7	6	22	22	15	0	0	0	0
42	2	5	8	1	15	20	22	0	0	0	0
42	3	3	4	5	19	19	15	0	0	0	0
42	4	2	7	4	6	13	10	0	0	0	0
42	5	3	2	8	13	13	9	0	0	0	0
42	6	2	2	8	7	15	18	0	0	0	0
42	7	1	3	8	5	3	4	0	0	0	0
42	8	1	1	8	11	12	14	0	0	0	0
42	9	1	1	8	11	10	17	0	0	0	0
42	10	1	1	8	11	11	17	0	0	0	0
42	11	1	1	8	11	11	17	0	0	0	0
42	12	1	1	8	11	11	17	0	0	0	0
42	13	1	1	8	11	11	17	0	0	0	0
42	14	1	1	8	11	11	17	0	0	0	0
42	15	1	1	8	11	11	17	0	0	0	0
42	16	1	1	8	11	11	17	0	0	0	0
42	17	1	1	8	11	11	17	0	0	0	0
42	18	1	1	8	11	11	17	0	0	0	0
42	19	1	1	8	11	11	17	0	0	0	0
42	20	1	1	8	11	11	17	0	0	0	0
42	21	1	1	8	11	11	17	0	0	0	0
42	22	1	1	8	11	11	17	0	0	0	0
42	23	1	1	8	11	11	17	0	0	0	0
42	24	1	1	8	11	11	17	0	0	0	0
42	25	1	1	8	11	11	17	0	0	0	0
42	26	1	1	8	11	11	17	0	0	0	0
42	27	1	1	8	11	11	17	0	0	0	0
42	28	1	1	8	11	11	17	0	0	0	0
42	29	1	1	8	11	11	17	0	0	0	0
42	30	1	1	8	11	11	17	0	0	0	0
42	31	1	1	8	11	11	17	0	0	0	0
42	32	1	1	8	11	11	17	0	0	0	0
42	33	1	1	8	11	11	17	0	0	0	0
42	34	1	1	8	11	11	17	0	0	0	0
42	35	1	1	8	11	11	17	0	0	0	0
42	36	1	1	8	11	11	17	0	0	0	0
42	37	1	1	8	11	11	17	0	0	0	0
42	38	1	1	8	11	11	17	0	0	0	0
42	39	1	1	8	11	11	17	0	0	0	0
42	40	1	1	8	11	11	17	0	0	0	0
42	41	1	1	8	11	11	17	0	0	0	0
42	42	1	1	8	11	11	17	0	0	0	0

LAMBDA(T) VECTORS FOR BASE PIPELINE

DATE 11-10-81

\*\*\* U N C L A S S I F I E D \*\*\*

EXAMPLE 42 NSN-S \*\*\* 40. A/C 1020 PH/SRT \*\*\* SORTIE RATES 0.60 3.00 1.00 1000 \*\*\* CONSTANT RCT/OST TIMES

Time (expressed as days of combat)

NSN	OPA	TIME	PCT
1	0000	0000	0000
2	0000	0000	0000
3	0000	0000	0000
4	0000	0000	0000
5	0000	0000	0000
6	0000	0000	0000
7	0000	0000	0000
8	0000	0000	0000
9	0000	0000	0000
10	0000	0000	0000
11	0000	0000	0000
12	0000	0000	0000
13	0000	0000	0000
14	0000	0000	0000
15	0000	0000	0000
16	0000	0000	0000
17	0000	0000	0000
18	0000	0000	0000
19	0000	0000	0000
20	0000	0000	0000
21	0000	0000	0000
22	0000	0000	0000
23	0000	0000	0000
24	0000	0000	0000
25	0000	0000	0000
26	0000	0000	0000
27	0000	0000	0000
28	0000	0000	0000
29	0000	0000	0000
30	0000	0000	0000

USERID FP330AÇKA

\*\*\* U N C L A S S I F I E D \*\*\*

MATRIX 2



### LAMBDA(T) VECTORS FOR CIRF PIPELINE

DATE 11-10-81

\*\*\* U N C L A S S I F I E D \*\*\*

EXAMPLE 42 NSN-S \*\*\* 48. A/C 1.20 FH/SRT \*\*\* SORTIE RATES 0.60 3.00 1.00 1.00 \*\*\* CONSTANT RCT/QST TIMES  
Time (expressed as days of combat)

[illegible]

USE810 FP330ACKA

\*\*\* U N C L A S S I F I E D \*\*\*

MATRIX 3

LAMBDA(T) VECTORS FOR DEPOT PIPELINE

DATE 11-10-68

\*\*\* U N C L A S S I F I E D \*\*\*

EXAMPLE 42 NSN-9 \*\*\* 40. A/C 120 FH/SRT \*\*\* SORTIE RATES 0.60 3.00 1.00 1.00 \*\*\* CONSTANT RCT/DST TIMES

Time (expressed as days of combat)

[illegible]

USEBIO FP330ACKA

\*\*\* U N C L A S S I F I E D \*\*\*

MATRIX 4



# MATRIX 5

## LAMBDA(T) VECTORS FOR TOTAL PIPELINE

DATE 11-10-81

\*\*\* UNCLASSIFIED \*\*\*

EXAMPLE 42 NSN=5 \*\*\* 40. A/C 1.20 FH/SRT \*\*\* SORTIE RATES 0.60 3.00 1.00 1.00 \*\*\* CONSTANT RET/DST TIMES

Time (expressed as days of combat)

NSN	OPA	TIME	PCT	-5	-4	-2	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39
40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41
42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42

USERID FP33DACKA

\*\*\* UNCLASSIFIED \*\*\*

MATRIX 5



M A T R I X 6

PROBABILITY OF K OR FEWER PARTS IN TOTAL PIPELINE ON DAY 0

DATE 11-10-68

\*\*\* U N C L A S S I F I E D \*\*\*

EXAMPLE 42 NSN=5 \*\*\* AF. A/C 1620 FH/SRT \*\*\* SORTIE RATES 0.60 3.00 1.00 1.00 \*\*\* CONSTANT RCT/QST TIMES

TARGET PROBABILITY 99.8

[illegible]

USERID FP330AÇKA

\*\*\* U N C L A S S I F I E D \*\*\*

MATRIX 6



# MATRIX 8

JOINT PROBABILITY VECTOR ON DAY 0 GIVEN STOCK OPTION 0

DATE 11-10-81

\*\*\* UNCLASSIFIED \*\*\*

EXAMPLE 42 NSN-S \*\*\* AD. A/C 1620 FH7SRT \*\*\* SORTIE RATES 0.60 3.00 1.00 1.00 \*\*\* CONSTANT RCT/DST TIMES

PARTS	PROB	PARTS	PROB
18	0.00001	68	0.00083
19	0.00003	69	0.00059
20	0.00006	70	0.00042
21	0.00012	71	0.00029
22	0.00021	72	0.00020
23	0.00037	73	0.00014
24	0.00063	74	0.00009
25	0.00101	75	0.00006
26	0.00158	76	0.00003
27	0.00239	77	0.00001
28	0.00350		
29	0.00497		
30	0.00687		
31	0.00924		
32	0.01210		
33	0.01545		
34	0.01924		
35	0.02341		
36	0.02764		
37	0.03237		
38	0.03685		
39	0.04108		
40	0.04487		
41	0.04806		
42	0.05051		
43	0.05210		
44	0.05278		
45	0.05254		
46	0.05141		
47	0.04947		
48	0.04683		
49	0.04363		
50	0.04003		
51	0.03616		
52	0.03219		
53	0.02824		
54	0.02443		
55	0.02084		
56	0.01754		
57	0.01456		
58	0.01193		
59	0.00965		
60	0.00771		
61	0.00608		
62	0.00474		
63	0.00365		
64	0.00278		
65	0.00209		
66	0.00155		
67	0.00114		

← Mode

USERID FP330ACKA

\*\*\* UNCLASSIFIED \*\*\*

MATRIX 8

PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 0  
GIVEN STOCK OPTION 2

\*\*\* U N C L A S S I F I E D \*\*\*

TARGET PROBABILITY 99 %

[illegible]



PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 0  
GIVEN STOCK OPTION 3

\*\*\* U N C L A S S I F I E D \*\*\*

TARGET PROBABILITY 99 %

USEB:ID FP330ACKA

\*\*\* U N C L A S S I F I E D \*\*\*

MATRIX 10

# MATRIX 11

PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 0  
GIVEN STOCK OPTION 4

DATE 11-10-81

\*\*\* UNCLASSIFIED \*\*\*

EXAMPLE 42 NSN-S \*\*\* AB. A/C 1.20 FH/SRT \*\*\* SORTIE RATES 0.60 3.00 1.00 1.00 \*\*\* CONSTANT RCT/DST TIMES

TARGET PROBABILITY																						99	3	
NSN	OPA	K	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	SL	EB0	
1	1	1	1.00																			0.00	0.00	
2	1	1	1.00																			0.00	0.00	
3	1	1	1.00																			0.00	0.00	
4	1	1	0.82	0.91	0.96	0.98	0.99	1.00														0.00	0.38	
5	2	1	1.00																			0.00	0.07	
6	2	1	0.96	0.98	0.99	1.00																0.00	0.00	
7	2	2	1.00																			0.00	0.00	
8	2	2	1.00																			0.00	0.00	
9	2	2	1.00																			0.00	0.00	
10	1	1	1.00																			0.00	0.00	
11	1	1	1.00																			0.00	0.00	
12	1	1	1.00																			0.00	0.00	
13	1	1	0.63	0.79	0.89	0.95	0.98	0.99	1.00													0.00	0.78	
14	1	1	1.00																			0.00	0.00	
15	1	1	0.76	0.91	0.97	0.99	1.00															0.00	0.37	
16	1	1	0.43	0.40	0.47	0.85	0.94	0.98	0.99	1.00												0.00	0.04	
17	1	1	0.00	0.96	0.98	0.99	1.00															0.00	0.16	
18	1	1	1.00																			0.00	0.01	
19	1	1	0.99	1.00																		0.00	0.00	
20	2	2	0.99	1.00																		0.00	0.00	
21	2	2	0.99	1.00																		0.00	0.00	
22	2	2	0.99	1.00																		0.00	0.00	
23	2	2	0.99	1.00																		0.00	0.00	
24	2	2	1.00																			0.00	0.00	
25	2	2	1.00																			0.00	0.00	
26	2	2	1.00																			0.00	0.00	
27	2	2	1.00																			0.00	0.00	
28	2	2	1.00																			0.00	0.00	
29	2	2	1.00																			0.00	0.00	
30	2	2	1.00																			0.00	0.00	
31	2	2	1.00																			0.00	0.00	
32	2	2	1.00																			0.00	0.00	
33	2	2	1.00																			0.00	0.00	
34	2	2	1.00																			0.00	0.00	
35	2	2	1.00																			0.00	0.00	
36	2	2	1.00																			0.00	0.00	
37	2	2	1.00																			0.00	0.00	
38	2	2	1.00																			0.00	0.00	
39	2	2	1.00																			0.00	0.00	
40	2	2	1.00																			0.00	0.00	
41	2	2	1.00																			0.00	0.00	
42	2	2	1.00																			0.00	0.00	
PR(NMCS=LE=K)			0.00	0.08	0.38	0.73	0.90	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PR(NMCS=K)			0.00	0.07	0.31	0.34	0.18	0.06	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
AVG NMCS			2.95																					
EXP BACKORDERS			10.42																					

USEBID FP33QACKA

\*\*\* UNCLASSIFIED \*\*\*

MATRIX 11

# MATRIX 12

## PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 0

### GIVEN STOCK OPTION 5

DATE 11-10-81

\*\*\* UNCLASSIFIED \*\*\*

EXAMPLE 42 NSN-9 \*\*\* AP. A/C 1:20 FH/SRT \*\*\* SORTIE RATES 0.60 3.00 1.00 1.00 \*\*\* CONSTANT RCT/DST TIMES

		TARGET PROBABILITY 99 8																					
NSN	QPA	K	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	SL	EBD
10	1	1	00																			00	00
11	1	1	00																			00	00
12	1	1	00																			00	00
13	1	1	00																			00	00
14	1	1	00																			00	00
15	1	1	00																			00	00
16	1	1	00																			00	00
17	1	1	00																			00	00
18	1	1	00																			00	00
19	1	1	00																			00	00
20	1	1	00																			00	00
21	1	1	00																			00	00
22	1	1	00																			00	00
23	1	1	00																			00	00
24	1	1	00																			00	00
25	1	1	00																			00	00
26	1	1	00																			00	00
27	1	1	00																			00	00
28	1	1	00																			00	00
29	1	1	00																			00	00
30	1	1	00																			00	00
31	1	1	00																			00	00
32	1	1	00																			00	00
33	1	1	00																			00	00
34	1	1	00																			00	00
35	1	1	00																			00	00
36	1	1	00																			00	00
37	1	1	00																			00	00
38	1	1	00																			00	00
39	1	1	00																			00	00
40	1	1	00																			00	00
41	1	1	00																			00	00
42	1	1	00																			00	00
PR(NMCS,LE=K)			0.90	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PR(NMCS=K)			0.90	0.07	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG NMCS			0.15																				
EXP BACKORDERS			0.15																				

USERID FP33DACKA

\*\*\* UNCLASSIFIED \*\*\*

MATRIX 12

PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 0  
GIVEN STOCK OPTION 6

\*\*\* U N C L A S S I F I E D \*\*\*

TARGET PROBABILITY 99 %

NSN	QPA	K	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	SL	E80
1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PR(NMCS,LE=K)	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PR(NMCS=K)	0.99	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG NMCS	0.01																					
EXP BACKORDERS	0.01																					

\*\*\* U N C L A S S I F I E D \*\*\*

MATRIX 13



PROBABILITY OF K OR FEWER PARTS IN TOTAL PIPELINE ON DAY 10

\*\*\* U N C L A S S I F I E D \*\*\*

TARGET PROBABILITY 99 8

\*\*\* U N C L A S S I F I E D \*\*\*

PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 10  
GIVEN STOCK OPTION 1

DATE 11-10-81

\*\*\* U N C L A S S I F I E D \*\*\*

EXAMPLE 42 NSN=3 \*\*\* AF, A/C 1620 FH/SRT \*\*\* SORTIE RATES 0.60 3.00 1.00 1.00 \*\*\* CONSTANT RCT/DST TIMES

PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 10 GIVEN STOCK OPTION 1

TARGET PROBABILITY 99 %

[illegible]

USERID FP330ACKA

\*\*\* U N C L A S S I F I E D \*\*\*

MATRIX 15

PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 10  
GIVEN STOCK OPTION 2

\*\*\* U N C L A S S I F I E D \*\*\*

TARGET PROBABILITY '99 8

\*\*\* U N C L A S S I F I E D \*\*\*

MATRIX 16



# MATRIX 17

## PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 10

### GIVEN STOCK OPTION 3

DATE 11-10-81

\*\*\* UNCLASSIFIED \*\*\*

EXAMPLE 42 NSN-S \*\*\* AM. A/C 1:20 FH/SRT \*\*\* SORTIE RATES 0.60 3.00 1.00 1.00 \*\*\* CONSTANT RCT/OST TIMES

TARGET PROBABILITY 99 8

NSN	OPA	K	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	SL	END
1	1	0	0.18	0.26	0.35	0.46	0.56	0.63	0.74	0.82	0.89	0.93	0.96	0.98	0.99	0.99	1.00	1.00	1.00	1.00	1.00	12	4.61
1	1	0	0.23	0.30	0.41	0.49	0.62	0.73	0.83	0.89	0.94	0.97	0.98	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	13	4.33
1	1	0	0.30	0.33	0.41	0.52	0.63	0.73	0.81	0.87	0.92	0.95	0.97	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	14	3.88
1	2	0	0.56	0.71	0.71	0.83	0.91	0.96	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	15	3.73
1	2	0	0.27	0.38	0.50	0.61	0.71	0.80	0.87	0.91	0.95	0.97	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	16	3.89
1	2	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17	3.93
1	2	0	0.57	0.69	0.79	0.88	0.92	0.95	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	18	3.84
1	2	0	0.77	0.88	0.94	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	19	3.83
1	2	0	0.31	0.43	0.55	0.66	0.76	0.83	0.89	0.93	0.96	0.98	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	20	3.51
1	2	0	0.88	0.95	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	21	3.55
1	2	0	0.74	0.85	0.92	0.96	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	22	3.44
1	2	0	0.47	0.59	0.71	0.80	0.87	0.92	0.95	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	23	3.43
1	2	0	0.88	0.95	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	24	3.43
1	2	0	0.81	0.90	0.95	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	25	3.43
1	2	0	0.41	0.54	0.66	0.77	0.85	0.91	0.95	0.97	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	26	3.43
1	2	0	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	27	3.43
1	2	0	0.51	0.67	0.79	0.88	0.94	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	28	3.43
1	2	0	0.73	0.85	0.93	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	29	3.43
1	2	0	0.70	0.81	0.88	0.94	0.97	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	30	3.43
1	2	0	0.78	0.88	0.94	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	31	3.43
1	2	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	32	3.43
1	2	0	0.22	0.33	0.45	0.58	0.69	0.79	0.86	0.92	0.95	0.97	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	33	3.43
1	2	0	0.50	0.66	0.79	0.88	0.94	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	34	3.43
1	2	0	0.40	0.54	0.68	0.79	0.87	0.93	0.96	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	35	3.43
1	2	0	0.65	0.77	0.86	0.92	0.95	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	36	3.43
1	2	0	0.43	0.56	0.74	0.83	0.90	0.94	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	37	3.43
1	2	0	0.87	0.94	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	38	3.43
1	2	0	0.75	0.85	0.92	0.96	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	39	3.43
1	2	0	0.94	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	40	3.43
1	2	0	0.37	0.51	0.65	0.77	0.86	0.92	0.95	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	41	3.43
1	2	0	0.01	0.03	0.03	0.04	0.06	0.08	0.11	0.15	0.19	0.24	0.30	0.36	0.42	0.49	0.56	0.62	0.68	0.73	20	14.82	
1	2	0	0.47	0.63	0.76	0.86	0.93	0.96	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	21	14.41
1	2	0	0.43	0.59	0.72	0.83	0.90	0.94	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	22	14.63
1	2	0	0.07	0.13	0.21	0.31	0.42	0.53	0.64	0.74	0.82	0.88	0.92	0.95	0.97	0.98	0.99	1.00	1.00	1.00	1.00	23	14.43
1	2	0	0.60	0.75	0.86	0.93	0.96	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	24	14.93
1	2	0	0.21	0.32	0.45	0.57	0.69	0.78	0.86	0.91	0.95	0.97	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	25	14.31
1	2	0	0.70	0.82	0.90	0.95	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	26	14.07
1	2	0	0.42	0.58	0.72	0.83	0.90	0.95	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	27	14.37
1	2	0	0.76	0.88	0.94	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	28	14.86
1	2	0	0.53	0.65	0.76	0.84	0.90	0.94	0.97	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	29	14.03
PR(NMCS,LE,K)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.05	0.09	0.14	0.21	0.29	0.39		
PR(NMCS=K)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.04	0.05	0.07	0.08	0.09		
AVG NMCS		19.74																					
EXP BACKORDERS		130.91																					

USERID FP330ACKA

\*\*\* UNCLASSIFIED \*\*\*

MATRIX 17



PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 10  
GIVEN STOCK OPTION 4

DATE 11-10-81

\*\*\* U N C L A S S I F I E D \*\*\*

EXAMPLE 42 NSN-9 \*\*\* 40. A/C 1220 FH/SRT \*\*\* SORTIE RATES 0.60 3.06 1.00 1200 \*\*\* CONSTANT RCT/DST TIMES

[illegible]

USEBID FP330AÇKA

\*\*\* U N C L A S S I F I E D \*\*\*

MATRIX 18

PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 10  
GIVEN STOCK OPTION 5

\*\*\* U N C L A S S I F I E D \*\*\*

TARGET PROBABILITY 99 %

MATRIX 19

# MATRIX 20

PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 10  
GIVEN STOCK OPTION 6

DATE 11-10-81

\*\*\* UNCLASSIFIED \*\*\*

EXAMPLE 42 NSN-8 \*\*\* 42. A/C 1.20 FH/SRT \*\*\* SORTIE RATES 0.60 3.00 1.00 1.00 \*\*\* CONSTANT RCT/OST TIMES

		TARGET PROBABILITY 99.8																			
NSN	OPA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	SL	EBO
1	1	0.93	0.96	0.98	0.99	1.00															0.15
2	1	0.94	0.97	0.98	0.99	1.00															0.13
3	1	0.97	0.98	0.99	1.00																0.07
4	2	0.96	0.98	0.99	1.00																0.08
5	2	0.97	0.98	0.99	1.00																0.06
6	2	0.93	0.94	0.95	0.97	0.99	0.11	0.14	0.17	0.21	0.25	0.29	0.34	0.39	0.44	0.49	0.54	0.59	0.64	0.68	1.00
7	2	0.94	0.97	0.99	1.00																0.00
8	2	0.95	0.98	0.99	1.00																0.00
9	2	0.96	0.98	0.99	1.00																0.00
10	2	0.98	0.99	1.00																	0.00
11	1	0.98	0.98	1.00																	0.00
12	1	0.95	0.97	0.99	1.00																0.00
13	1	0.96	0.98	0.99	1.00																0.00
14	1	0.96	0.98	0.99	1.00																0.00
15	1	0.97	0.98	0.99	1.00																0.00
16	1	0.97	0.97	0.98	0.99	1.00															0.00
17	1	0.93	0.97	0.98	0.99	1.00															0.00
18	1	0.95	0.98	0.99	1.00																0.00
19	1	0.94	0.97	0.99	1.00																0.00
20	2	0.97	0.99	0.99	1.00																0.00
21	1	0.98	0.99	1.00																	0.00
22	1	0.97	0.99	1.00																	0.00
23	1	0.96	1.00																		0.00
24	1	0.95	0.97	0.99	1.00																0.00
25	1	0.97	0.99	0.99	1.00																0.00
26	1	0.97	0.99	0.99	1.00																0.00
27	4	0.95	0.98	0.99	1.00																0.00
28	1	0.97	0.99	0.99	1.00																0.00
29	1	0.98	0.99	1.00																	0.00
30	1	0.96	0.98	0.99	1.00																0.00
31	1	0.94	0.99	1.00																	0.00
32	1	0.95	0.98	0.99	1.00																0.00
33	4	0.95	0.97	0.98	0.99	1.00	0.99	1.00													0.00
34	1	0.96	0.98	0.99	1.00																0.00
35	1	0.94	0.97	0.99	1.00																0.00
36	1	0.95	0.97	0.98	0.99	1.00															0.00
37	1	0.96	0.98	0.99	1.00																0.00
38	1	0.95	0.97	0.98	0.99	1.00															0.00
39	1	0.98	0.99	1.00																	0.00
40	1	0.95	0.98	0.99	1.00																0.00
41	1	0.97	0.99	1.00																	0.00
42	1	0.97	0.98	0.99	1.00																0.00
PRINMCSLEAK		0.01	0.03	0.07	0.12	0.20	0.28	0.38	0.48	0.59	0.68	0.78	0.83	0.89	0.93	0.95	0.97	0.98	0.99	1.00	
PRINMCSMK		0.01	0.02	0.04	0.06	0.07	0.09	0.10	0.10	0.10	0.09	0.08	0.07	0.05	0.04	0.03	0.02	0.01	0.01	0.00	
AVG NMCS		7.86																			
EXP BACKORDERS		18.15																			

USERID FP33QACKA

\*\*\* UNCLASSIFIED \*\*\*

MATRIX 20

PROBABILITY OF K OR FEWER PARTS IN TOTAL PIPELINE ON DAY 30

\*\*\* U N C L A S S I F I E D \*\*\*

TARGET PROBABILITY 99 %

\*\*\* U N C L A S S I F I E D \*\*\*



PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 30  
GIVEN STOCK OPTION 1

\*\*\* U N C L A S S I F I E D \*\*\*

TARGET PROBABILITY 99 %

MATRIX 22

# MATRIX 23

## PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 30

### GIVEN STOCK OPTION 2

DATE 11-10-81

\*\*\* UNCLASSIFIED \*\*\*

EXAMPLE 42 NSN-S \*\*\* 40. A/C 1.20 FH/SRT \*\*\* SORTIE RATES 0.60 3.00 1.00 1.00 \*\*\* CONSTANT RCT/DST TIMES

TARGET PROBABILITY 99 %																							
NSN	OPA	K	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	SL	EBD
1	1	1	0.90	0.95	0.98	0.99	1.00	0.29	0.38	0.48	0.58	0.67	0.75	0.82	0.87	0.92	0.95	0.97	0.98	0.99	0.99	17	0.18
2	1	1	0.93	0.98	0.99	1.00	0.54	0.65	0.75	0.83	0.89	0.93	0.98	0.98	0.99	0.99	1.00					12	0.09
3	2	1	0.56	0.72	0.85	0.92	0.97	0.99	0.99	1.00												8	0.44
4	1	1	0.47	0.61	0.73	0.83	0.90	0.94	0.97	0.98	0.99	1.00										14	0.58
5	2	1	0.45	0.52	0.59	0.65	0.71	0.77	0.81	0.86	0.89	0.92	0.94	0.96	0.97	0.98	0.99	0.99	0.99	1.00		14	0.03
6	2	1	0.11	0.02	0.05	0.10	0.17	0.27	0.38	0.51	0.62	0.73	0.81	0.88	0.93	0.96	0.98	0.99	0.99	1.00		15	0.08
7	2	1	0.93	0.98	0.99	1.00																4	0.00
8	1	1	0.69	0.85	0.94	0.98	0.99	1.00														3	0.00
9	1	1	0.83	0.93	0.97	0.99	0.99	1.00														3	0.00
10	1	1	0.19	0.30	0.42	0.54	0.66	0.76	0.84	0.90	0.94	0.97	0.98	0.99	1.00							11	0.00
11	1	1	0.32	0.54	0.73	0.86	0.93	0.97	0.99	1.00												6	0.06
12	1	1	0.54	0.71	0.84	0.92	0.96	0.98	0.99	1.00												6	0.06
13	1	1	0.37	0.55	0.70	0.82	0.90	0.95	0.98	0.99	1.00											7	0.00
14	1	1	0.22	0.33	0.46	0.58	0.69	0.79	0.86	0.92	0.95	0.97	0.99	0.99	1.00							10	0.00
15	1	1	0.72	0.84	0.92	0.96	0.99	0.99	1.00													4	0.00
16	1	1	0.14	0.27	0.42	0.58	0.73	0.83	0.91	0.95	0.98	0.99	1.00									9	0.00
17	2	1	0.34	0.13	0.27	0.44	0.62	0.76	0.87	0.93	0.97	0.99	0.99	1.00								9	0.00
18	1	1	0.40	0.54	0.67	0.78	0.86	0.92	0.95	0.98	0.99	0.99	1.00									6	0.00
19	1	1	0.52	0.68	0.80	0.89	0.94	0.97	0.99	1.00												2	0.00
20	1	1	1.00																			0	0.00
21	1	1	0.96	0.98	0.99	1.00																0	0.00
22	1	1	1.00																			0	0.00
23	1	1	0.31	0.50	0.67	0.81	0.90	0.95	0.98	0.99	1.00											10	0.00
24	1	1	0.19	0.31	0.45	0.59	0.72	0.82	0.89	0.94	0.97	0.98	0.99	1.00								10	0.00
25	1	1	0.76	0.86	0.93	0.97	0.99	0.99	1.00													4	0.00
26	1	1	0.51	0.70	0.84	0.92	0.97	0.99	1.00													5	0.00
27	1	1	0.31	0.46	0.61	0.74	0.84	0.91	0.95	0.98	0.99	0.99	1.00									6	0.00
28	1	1	0.96	1.00																		0	0.00
29	4	1	0.59	0.74	0.85	0.92	0.96	0.98	0.99	1.00												6	0.00
30	1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.04	0.05	0.08	41	0.00
31	1	1	0.49	0.64	0.76	0.86	0.92	0.96	0.98	0.99	1.00											7	0.00
32	1	1	0.54	0.69	0.81	0.90	0.93	0.95	0.97	0.98	0.99	0.99	1.00									12	0.00
33	1	1	0.42	0.56	0.70	0.81	0.88	0.94	0.97	0.98	0.99	0.99	1.00									8	0.00
34	1	1	0.90	0.95	0.98	0.99	1.00															3	0.00
35	1	1	0.41	0.54	0.67	0.78	0.86	0.92	0.95	0.98	0.99	0.99	1.00									3	0.00
36	1	1	0.57	0.71	0.82	0.90	0.95	0.97	0.99	0.99	1.00											3	0.00
37	1	1	0.87	0.94	0.98	0.99	1.00															1	0.00
38	1	1	0.29	0.47	0.64	0.78	0.88	0.94	0.97	0.99	1.00											2	0.00
39	1	1	0.34	0.48	0.61	0.72	0.82	0.89	0.93	0.96	0.98	0.99	1.00									2	0.00
PR(NMCS,LE,K)			0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.11	0.28	0.47	0.64	0.76	0.84	0.90	0.94	0.96	0.98	0.99	0.99		
PR(NMCS,H,K)			0.50	0.00	0.00	0.00	0.00	0.00	0.02	0.09	0.17	0.19	0.17	0.12	0.08	0.06	0.04	0.02	0.02	0.01	0.01		
AVG NMCS			10.18																				
EXP BACKORDERS			101.93																				

USERID FP330ACKA

\*\*\* UNCLASSIFIED \*\*\*

MATRIX 23

PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 30  
GIVEN STOCK OPTION 3

DATE 11-10-81

\*\*\* U N C L A S S I F I E D \*\*\*

EXAMPLE 42 NSN-S \*\*\* 48. A/C 1.20 FH/SRT \*\*\* SORTIE RATES 0.60 3.00 1.00 1.00 \*\*\* CONSTANT RCT/QST TIMES

[illegible]

USERID FP330ACKA

\*\*\* U N C L A S S I F I E D \*\*\*

MATRIX 24



# MATRIX 25

## PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 30

### GIVEN STOCK OPTION 4

DATE 11-10-81

\*\*\* UNCLASSIFIED \*\*\*

EXAMPLE 42 NSN-S \*\*\* 40. A/C 1.20 FH/SRT \*\*\* SORTIE RATES 0.60 3.00 1.00 1.00 \*\*\* CONSTANT RCT/DST TIMES

		TARGET PROBABILITY 99 %																		SL	EB0
NSN	QPA \ K 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
1000000000	1	1.00																		0	0.00
1000000000	1	0.40	0.50	0.57	0.75	0.82	0.87	0.92	0.95	0.97	0.98	0.99	0.99	1.00						10	0.05
1000000000	1	1.00																		10	0.37
1000000000	2	0.07	0.12	0.20	0.31	0.42	0.55	0.65	0.75	0.83	0.89	0.93	0.96	0.98	0.99	1.00				13	0.00
1000000000	2	1.00																		8	1.58
1000000000	2	0.47	0.61	0.73	0.83	0.90	0.94	0.97	0.98	0.99	1.00									0	0.00
1000000000	2	1.00																		0	0.00
1000000000	2	0.62	0.73	0.81	0.88	0.93	0.96	0.98	0.99	0.99	1.00									7	0.12
1000000000	2	1.00																		0	0.00
1000000000	2	1.00																		0	0.00
1000000000	2	1.00																		0	0.00
1000000000	2	0.97	0.99	1.00																0	0.00
1000000000	2	0.02	0.06	0.11	0.19	0.30	0.42	0.54	0.66	0.76	0.84	0.90	0.94	0.97	0.98	0.99	1.00			14	0.00
1000000000	2	0.93	0.97	0.99	1.00															14	0.33
1000000000	2	0.06	0.03	0.04	0.09	0.18	0.33	0.54	0.71	0.84	0.92	0.96	0.98	0.99	1.00					14	0.25
1000000000	2	1.00																		0	0.00
1000000000	2	0.03	0.03	0.09	0.21	0.37	0.53	0.70	0.82	0.90	0.95	0.98	0.99	1.00						11	0.40
1000000000	2	0.13	0.22	0.33	0.46	0.58	0.69	0.79	0.86	0.92	0.95	0.97	0.99	1.00						11	0.13
1000000000	2	1.00																		0	0.00
1000000000	2	0.58	0.73	0.83	0.91	0.95	0.98	0.99	1.00											6	0.01
1000000000	2	0.44	0.62	0.76	0.87	0.93	0.97	0.99	0.99	1.00										6	0.04
1000000000	2	0.40	0.54	0.67	0.78	0.86	0.92	0.95	0.98	0.99	1.00									8	0.01
1000000000	2	0.52	0.68	0.80	0.89	0.94	0.97	0.99	1.00											8	0.22
1000000000	2	1.00																		0	0.00
1000000000	2	1.00																		0	0.00
1000000000	2	0.99	1.00																	0	0.00
1000000000	2	0.43	0.59	0.72	0.82	0.89	0.94	0.97	0.98	0.99	1.00									8	0.01
1000000000	2	0.99	1.00																	0	0.01
1000000000	2	0.70	0.84	0.92	0.97	0.99	1.00													0	0.01
1000000000	2	0.31	0.46	0.61	0.74	0.84	0.91	0.95	0.98	0.99	0.99	1.00								8	0.58
1000000000	2	1.00																		0	0.00
1000000000	2	0.84	0.92	0.96	0.98	0.99	1.00													0	0.00
1000000000	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	4	0.29
1000000000	2	0.76	0.86	0.92	0.96	0.98	0.99	1.00												4	0.06
1000000000	2	0.70	0.80	0.88	0.93	0.96	0.98	0.99	1.00											4	0.54
1000000000	2	0.99	1.00																	0	0.76
1000000000	2	1.00																		0	0.01
1000000000	2	0.99	0.99	1.00																0	0.02
1000000000	2	0.57	0.71	0.82	0.90	0.95	0.97	0.99	0.99	1.00										0	0.02
1000000000	2	0.99	1.00																	0	1.10
1000000000	2	0.76	0.86	0.94	0.97	0.99	1.00													0	0.01
1000000000	2	0.93	0.96	0.98	0.99	1.00														4	0.44
1000000000	2	0.93	0.96	0.98	0.99	1.00														4	0.14
PRINCS=K		0.00	0.00	0.00	0.00	0.00	0.02	0.10	0.29	0.52	0.72	0.85	0.92	0.96	0.98	0.99	1.00	1.00	1.00		
PRINCS=K		0.00	0.00	0.00	0.00	0.00	0.02	0.08	0.18	0.24	0.20	0.13	0.07	0.04	0.02	0.01	0.01	0.00	0.00		
AVG NCS		9.64																			
EXP BACKORDERS		73.21																			

ISEBID FP33QACKA

\*\*\* UNCLASSIFIED \*\*\*

MATRIX 25



# MATRIX 26

PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 30  
GIVEN STOCK OPTION 5

DATE 11-10-81

\*\*\* UNCLASSIFIED \*\*\*

EXAMPLE 42 NSN-S \*\*\* 48, A/C 1.20 FH/SRT \*\*\* SORTIE RATES 0.60 3.05 1.00 1.00 \*\*\* CONSTANT RCT/DST TIMES

TARGET PROBABILITY																						99 %	
NSN	OPA	K	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	SL	END	
22	1	1	0.00																		0	0.00	
23	1	1	0.87	0.42	0.95	0.97	0.98	0.99	0.99	1.00											0	0.35	
24	1	1	0.30																		0	0.00	
25	1	1	0.73	0.83	0.89	0.93	0.96	0.98	0.99	0.99	1.00										0	0.69	
26	1	2	0.50																		0	0.00	
27	1	1	0.99	1.00																	0	0.01	
28	1	1	0.90																		0	0.00	
29	2	1	0.73	0.81	0.88	0.93	0.96	0.98	0.99	0.99	1.00										0	0.74	
30	1	1	0.00																		0	0.00	
31	1	1	0.00																		0	0.00	
32	1	1	0.49	0.99	1.00																0	0.00	
33	1	1	0.66	0.76	0.84	0.90	0.94	0.97	0.98	0.99	1.00										0	0.98	
34	1	1	0.97	0.99	1.00																0	0.00	
35	1	1	0.33	0.54	0.71	0.84	0.92	0.96	0.98	0.99	1.00										0	0.71	
36	1	1	0.92	0.90	0.93	0.98	0.99	1.00													0	0.50	
37	1	1	0.46	0.58	0.69	0.79	0.86	0.92	0.95	0.97	0.99	0.99	1.00								0	0.01	
38	1	1	0.99	1.00																	0	0.01	
39	1	1	0.33	0.91	0.95	0.98	0.99	1.00													0	0.35	
40	2	1	0.87	0.93	0.97	0.99	0.99	1.00													0	0.25	
41	1	1	0.77	0.78	0.86	0.92	0.95	0.98	0.99	0.99	1.00										0	0.87	
42	1	1	0.99	0.94	0.97	0.99	1.00														0	0.24	
43	1	1	0.00																		0	0.00	
44	1	1	0.00																		0	0.00	
45	1	1	0.00																		0	0.00	
46	4	1	0.97	0.98	0.99	1.00															0	0.00	
47	1	1	0.97	0.99	1.00																0	0.00	
48	1	1	0.74	0.84	0.91	0.95	0.98	0.99	0.99	1.00											0	0.00	
49	1	1	0.00																		0	0.00	
50	1	1	0.98	0.99	1.00																0	0.00	
51	4	1	0.15	0.19	0.24	0.29	0.35	0.41	0.48	0.54	0.60	0.66	0.71	0.76	0.81	0.85	0.88	0.91	0.93	0.95	0.96	2	0.06
52	1	1	0.86	0.92	0.96	0.98	0.99	1.00														0	0.44
53	1	1	0.93	0.96	0.98	0.99	1.00															0	0.30
54	1	1	0.00																			0	0.14
55	1	1	0.00																			0	0.00
56	1	1	0.00																			0	0.00
57	1	1	0.00																			0	0.00
58	1	1	0.99	1.00																		0	0.01
59	1	1	0.93	0.97	0.99	0.99	1.00															0	0.10
60	1	1	0.00																			0	0.00
61	1	1	0.94	0.97	0.99	1.00																0	0.10
62	1	1	0.96	0.98	0.99	1.00																0	0.07
PR(NMCS,LE=K)			0.00	0.02	0.12	0.33	0.57	0.76	0.87	0.94	0.97	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PR(NMCS=K)			0.00	0.02	0.10	0.21	0.24	0.19	0.11	0.06	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
AVG NMCS			4.44																				
EXP BACKORDERS			17.37																				

USEBID FP330ACKA

\*\*\* UNCLASSIFIED \*\*\*

MATRIX 26

PROBABILITY OF K OR FEWER BACKORDERS IN TOTAL PIPELINE ON DAY 30  
GIVEN STOCK OPTION 6

\*\*\* U N C L A S S I F I E D \*\*\*

TARGET PROBABILITY 99 %

USEBID FP330ACKA

\*\*\* U N C L A S S I F I E D \*\*\*

MATRIX 27

# DISTRIBUTION

HQ USAF/SAG	1	Dynamics Research Corp	1
LE	1	Attn: Mr Limpert	
Wash DC 20330		60 Concord Street	
		Wilmington MA 01887	
HQ AFLC/XRS	1		
LORA	1	The Rand Corporation	2
MMMA	1	Attn: Dr G. Crawford	
Wright-Patterson AFB OH 45433		1700 Main Street	
		Santa Monica CA 90406	
HQ MAC/LG	1		
Scott AFB IL 62225		Logistics Management Institute	1
		4701 Sangamore Road	
HQ PACAF/OA	8	P.O. Box 9489	
Hickam AFB HI 96853		Wash DC 20016	
		DTIC	12
HQ SAC/NR	1	Cameron Station	
Offutt AFB NE 68113		Alexandria VA 22314	
HQ TAC/LG	1	DLSIE/ALMC	1
Langley AFB VA 23665		US Army Logistics Mgt Ctr	
		Ft Lee VA 23801	
HQ USAFE/DOA	1		
LG	1	Naval Postgraduate School	
APO New York 09012		Adm Sciences Dept, Code 54	1
		Library, Code 0142	1
USAF/DFMS (Maj R. Rue)	1	Monterey CA 93940	
USAF Academy CO 80840			
AFHRL	1	AU AUL/LD	1
Human Factors Div (Mr F. Maher)		Maxwell AFB AL 36112	
Wright-Patterson AFB OH 45433			
		HQ ATC/LG	1
AFIT/LDEJ	1	Randolph AFB TX 78150	
LSM	1		
Wright-Patterson AFB OH 45433		HQ AAC/LGSM	1
		Elmendorf AFB AK 99506	
AFLMC/LG	1		
Gunter AFS AL 36114			

U217186